



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,788	03/29/2004	Michael E. Rivir	12920/507125	9488
7590		01/23/2008	EXAMINER	
FROST BROWN TODD LLC			THOMAS, DAVID B	
2200 PNC Center			ART UNIT	PAPER NUMBER
201 E. Fifth Street			3723	
Cincinnati, OH 45202-4182				
			MAIL DATE	DELIVERY MODE
			01/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/811,788	Applicant(s) RIVIR ET AL.
	Examiner David B. Thomas	Art Unit 3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 December 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 15-38 is/are pending in the application.
- 4a) Of the above claim(s) 29-38 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 15-21,24 and 25 is/are rejected.
- 7) Claim(s) 22,23,27 and 28 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No./Mail Date 7/19/04
- 4) Interview Summary (PTO-413)
 Paper No./Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 29-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 17 December 2007.

Claim Objections

2. Claims 16 and 19 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claim 16 merely repeats clause (b) of claim 15. Regarding claim 19, the recitation that the "particles are cryogenic particles" is immaterial to the structure of the device and forms no part of the device. Therefore, claim 19 has not been considered, because the type of particles used with the device is not germane to the issue of patentability of the device itself.

3. Claim 22 objected to because of the following informalities: Claim 22 recites, "said at one member" thus rendering the claim unclear. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 15-18, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Abbott (5,618,177).

Abbott discloses a particle blast apparatus having, *inter alia*, a hopper; a device 72 that is carried by the hopper to impart energy to the hopper; a frame 54 supporting the hopper 50, where the hopper is not rigidly supported 52 by the frame 54; and wherein the device 72 is mounted adjacent the exit of the hopper and comprises a vibrator.

6. Claims 15-17 and 25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Beck (2,246,497).

7. Claims 15, 16, 25, and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dumbaugh et al. (3,257,040).

8. Claims 15, 16, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Gibot et al. (4,707,951).

Although not explicit, it appears from the drawings that Gibot et al. disclose, *inter alia*, a hopper having an inclined wall and a vibrator mounted to the inclined wall such that an axis of the vibrator is parallel to the inclined wall (see Fig. 1, there appears to be a motor mounted to the right side of hopper 20, and in the description, Gibot et al. refer to the hopper as a "vibrating hopper 20").

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

Art Unit: 3723

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 15-17, 19-21, and 24 are rejected on the ground of nonstatutory double patenting over claims 1-9 of U. S. Patent No. 6,726,549 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: a hopper; an impulse assembly that is carried by the hopper; a frame, where the hopper is not rigidly supported by the frame; and, cryogenic particles.

11. Claims 15-17, 19-21, and 24 are rejected on the ground of nonstatutory double patenting over claims 1-7 of U. S. Patent No. 6,524,172 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: a hopper; an impulse assembly that is carried by

the hopper; a frame, where the hopper is not rigidly supported by the frame; and, cryogenic particles.

Allowable Subject Matter

12. Claims 22, 23, 27, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if the limitations of either claim 22 or 27 is rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David B. Thomas whose telephone number is (571) 272-4497. The examiner's e-mail address is: dave.thomas@uspto.gov. The examiner can normally be reached on Mon-Fri 10am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Art Unit: 3723

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David B. Thomas/
Primary Examiner, Art Unit 3723

/DBT/